

## Abstract

Reconstruction method for reconstructing a first signal  $(x(t))$  regularly sampled at a sub-Nyquist rate, comprising the step of retrieving from the regularly spaced sampled values  $(y_s[n], y(nT))$  a set of weights  $(c_n, c_{nr}, c_k)$  and shifts  $(t_n, t_k)$  with which said first signal  $(x(t))$  can be reconstructed.

The reconstructed signal  $(x(t))$  can be represented as a sequence of known functions  $(\gamma(t))$  weighted by the weights  $(c_k)$  and shifted by the shifts  $(t_k)$ . The sampling rate is at least equal to the rate of innovation  $(\rho)$  of the first signal  $(x(t))$ .